Name:

p1106: Solve by factoring (v4)

1. Solve the equation

$$x^2 - 10x + 21 = 0$$

$$(x-3)(x-7) = 0$$
$$x = 7$$
$$x = 3$$

2. Solve the equation

$$x^2 - 10x + 16 = 0$$

$$(x-8)(x-2) = 0$$
$$x = 2$$
$$x = 8$$

3. Solve the equation

$$9x^2 - 9x + 30 = 8x^2 + x + 5$$

$$x^2 - 10x + 25 = 0$$
$$(x-5)(x-5) = 0$$
$$x = 5$$
$$x = 5$$

4. Solve the equation

$$6x^2 + 7x + 34 = 5x^2 - 5x + 2$$

$$x^2 + 12x + 32 = 0$$
$$(x+8)(x+4) = 0$$
$$x = -4$$
$$x = -8$$

5. Solve the equation

$$6x^2 - 3x - 44 = 5x^2 - x + 4$$

$$x^2 - 2x - 48 = 0$$
$$(x-8)(x+6) = 0$$
$$x = -6$$
$$x = 8$$

6. Solve the equation

$$11x^2 + 74x - 21 = 0$$

$$(11x - 3)(x + 7) = 0$$
$$x = -7$$
$$x = \frac{3}{11}$$

7. Solve the equation

$$7x^2 + 39x + 20 = 0$$

$$(7x + 4)(x + 5) = 0$$
$$x = -5$$
$$x = \frac{-4}{7}$$

8. Solve the equation

$$4x^2 - 19x - 40 = x^2 - 3x - 5$$

$$3x^2 - 16x - 35 = 0$$
$$(3x + 5)(x - 7) = 0$$
$$x = 7$$
$$x = \frac{-5}{3}$$

9. Solve the equation

$$6x^2 - 42x - 41 = x^2 - 6x - 9$$

$$5x^2 - 36x - 32 = 0$$
$$(5x + 4)(x - 8) = 0$$
$$x = 8$$
$$x = \frac{-4}{5}$$

10. Solve the equation

$$4x^2 - 79 = 2x^2 - 9x + 2$$

$$2x^2 + 9x - 81 = 0$$
$$(2x - 9)(x + 9) = 0$$
$$x = -9$$
$$x = \frac{9}{2}$$